

# •Self-Reliance

Number 2 June 1976

The Institute for Local Self-Reliance

Washington DC

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## Self-Reliance

Published bi-monthly by the  
Institute for Local Self-Reliance,  
at 1717 18th Street, N.W.,  
Washington, DC 20009.  
(202) 232- 4108.

Subscriptions:  
Individuals, \$6; Institutions, \$12.

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Typesetting by Unicorn Graphics;  
Printing by Collective Impressions.

## A Word from the Staff

Two months ago, we published the first issue of SELF-RELIANCE. We had hesitated to add another newsletter to an already crowded field; but we felt that there was a gap to be filled and that a publication which attempted to unite and integrate the various trends toward decentralization and self-reliance would be an important one. The response we have received since then has been more than encouraging; and we thank those who have given their support. The newsletter appears to have addressed the needs and expressed the desires of many different segments of the American population. Our audience is varied: individuals, community action groups, labor unions, academicians, municipal officials, people involved in many different lines of work. Those who are working hard in order to create strong neighborhood associations to fight for the very existence of their neighborhoods are intrigued and excited by the idea of using new technologies and new economic forms to create a base of economic power within their communities. Those who are involved in the movement for worker self-management are attracted to the concept of appropriate technologies which could lighten the work load. Those who are pursuing research in renewable energy sources are supportive of the logic for and the necessity of developing a decentralist perspective to their efforts.

Most of all, people seem pleased and excited that there are so many other people and groups working with determination toward the goal of creating a new value system and a new distribution of economic and political power. That is the theme and the purpose of this newsletter: to give these people and this movement a voice, both to report on practice and to weave a theory of localism which strikes at the root of questions of power, of efficiency and of responsiveness.

## The Newsletter

Our first issue of SELF-RELIANCE was twelve pages long; the current issue is sixteen pages. As more information comes in, the newsletter will continue to grow; but, as we said in our first issue, it all depends on you. The staff of the Institute for Local Self-Reliance is small and our primary work is in preparing demonstration projects and providing technical assistance. As a result of our work, we are in contact with groups which are creating the kind of institutions and programs which are reported on in SELF-RELIANCE; but there are, undoubtedly, hundreds of groups which still remain hidden. You can help us, and you can help your fellow readers, by telling us about them. The sharing of knowledge is a powerful tool.

It has begun: the cross-fertilization of ideas which we feel is crucial is now occurring in the movement for ecological, decentralized economic and political systems. At the Alliance for Neighborhood Government Conference held in Philadelphia in April, at the Future of Cities Conference sponsored by Goddard College in New York in May, at the International Conference on Self-Management in Washington and the National Conference on Alternative State and Local Public Policies in Austin, both being held in June — the story is the same. Technology, economics and politics are discussed as different focal points of the same struggle. The commitment to action, to finding out what works and what doesn't, is expressed over and over again. It is the realization of this commitment in practice, in whatever form it takes, which will continue to be the subject of the SELF-RELIANCE Newsletter.

# The Battle for Municipal Garbage

There is a national battle underway over who will control and profit from a valuable resource which we city dwellers produce each year: 150 million tons of garbage.

Large corporations which produce most of our garbage want cities to invest in expensive, high technology resource recovery systems which require no change in present production techniques or waste generation levels. The corporations, having geared production so as to maximize plant efficiency and profit, do not want to have to change their production techniques; so they now tell our cities that it is not in the economic interest of society at large to change course and that if cities really want to further economic growth, they should provide the capital for high technology resource recovery systems.

These expensive systems have already been planned for fifty cities; but pilot projects have not had encouraging results. Plants built in Nashville, Baltimore and St. Louis are all plagued by malfunctions. Equipment which is supposed to mechanically separate out valuable materials from the combined waste flow has not operated according to plan. Boilers that are to burn the remaining fraction as fuel supplements to power plants have failed as well. Air pollution has not been brought under control.

Technology is not the only problem being encountered; cost is a problem as well. Private industry is actively campaigning for these plants, but private capital has not been risked. Promoters have had to seek investment capital from the public sector: in Missouri and Connecticut, \$80 and \$250 million respectively have been raised through state bonding authorities. When private investment is made, as in New Orleans and Hempstead, Long Island, the cities have had to sign contracts forbidding source reduction legislation and guaranteeing minimum deliveries of garbage. Promoters are pushing unproven technology and unproven profitability; and they are expecting the public to pay. In Nashville, bond holders will lose their \$16 million investment unless another \$8 million is raised. In Portland, Oregon, and Washington, D.C., city councils have rejected proposed high technology plants on the basis of technical and cost considerations.

The rush to build plants with as yet unproven technology is caused in part by corporate attempts to stop governments from passing source reduction legislation and in part by their desire to monopolize garbage resources. The corporations, whose packaging wastes account for 34% of the municipal waste stream, are afraid that "bottle bills" and other source reduction legislation will force their current profitable production and distribution systems to be changed. The contracts forced on New Orleans and Hempstead point up that fear: the more there is recycling done by businesses, factories, offices, universities and community groups before their wastes are put into the municipal waste stream, the more difficult it will be for cities to guarantee quality and quantity of wastes going to resource recovery facilities. So the corporations are hurrying to create a fact, to build these high technology facilities before the structure of waste

collection and recycling can be significantly altered. They are gambling: Union Electric in St. Louis is building an \$80 million, 8000 ton plant based on the results of a 300 ton EPA pilot plant which itself has yet to operate at more than 50% capacity. In three years, when the larger plant is completed, total collection and disposal costs will be \$50 per ton, exactly what they are now; the difference will be that, with the help of public funds, Union Electric will have secured the control of and the profits from the wastes of the people of Saint Louis.

High technology resource recovery systems are a solution to the garbage problems of the large bottling, can manufacturing and construction companies; they are not a solution to the very real garbage problems of cities and their citizens. Even if high technology systems were to work, they would not be the best solution to the national waste management crisis.

### Collection/Recycling

The growing collection/recycling movement is the result of hard work by many men and women around the country, by sensible citizens and concerned public officials. It is being fostered by three important developments:

- 1 The environmental imperatives which threaten our air, water, soil and food cycles;
- 2 The incredibly high environmental and financial costs of traditional solid waste systems and high technology alternatives;
- 3 The technical failures of risky high technology systems which are now more frequently reported to the public.

It is important that significant developments in the recycling field be publicized and disseminated to others who may be interested. The best source of information is *The Wastebin*, the newsletter of practical recycling. Subscriptions are \$1/yr., and the address is Box 14012, Portland, Oregon 97214. Recyclers should report on their projects both to *The Wastebin* and to the Task Force on Waste Utilization here at the Institute.

A viable, comprehensive, cost-efficient and environmentally safe alternative does exist, although it remains difficult to convince some government officials who have been led to believe that bigger is better and that costlier is safer. In over 70 cities across the country, decentralized collection/recycling systems have been established and they are working. The systems are based upon household and business pre-sorting of the 70% to 95% of municipal solid waste which is recyclable. Between 50% to 65% of our garbage is recyclable aluminum, glass, ferrous

*continued on page 14*

# Public Funds in Private Hands

Income tax time has come and gone for 1976, and you might be breathing a sigh of relief that it won't come again for another twelve months. And as you were filling out your return, you might have had a twinge of malicious satisfaction in knowing that, while you had only one return to fill, the government had to deal with countless millions of forms. Municipal and state governments have to deal with more than personal income tax returns. Property tax payments, sales taxes, franchise fees, entertainment taxes, corporate income taxes, almost anything but a poll tax is used by our cities, states, and educational, sewer and water districts in their efforts to raise revenues. In some places these revenues come to astronomical sums. The District of Columbia, a quasi city-state, raised over \$1 billion in 1975. Even in a mid-sized state such as Indiana, state and local taxes amounted to \$2.5 billion in 1975.

These revenues are used to operate the government and to provide public services. Your income taxes will pay for the time of a city employee; your property taxes will purchase a few textbooks for the local high school. Within this procedure of governmental receiving and expending, though, there is a time lag. Most taxes are paid at regular intervals. Personal income taxes are paid yearly, corporate income taxes are often paid quarterly, and property taxes annually or semi-annually. In the middle of April all governments have a large amount of money; but the money will be used to finance operations and services over the period of a few months.

## The Role of Banks

During this time lag between receipt of revenues and expenditure, banks generally hold the money for governmental bodies and agencies. The money is deposited, like an individual consumer's money, in either checking or savings accounts. The short-term money, which will be expended within a few days, is usually in the checking account. The longer-termed money will remain in a savings account until it needs to be used.

Clearly, banks do not hold governmental money as a favor. Banks make money on the deposits they hold, by lending the deposit money out in loans for various purposes at interest rates higher than those they pay on deposits. Money left on deposit for only one day generates revenue for a bank, with the national average being \$150 profit per day for each million dollars held in a checking account. Governmental bodies usually keep large sums on deposit, and the bank's gross profit from each million a day will more than pay the salary of a teller for a week. Interest is paid to depositors on savings accounts, so money deposited in a savings account will not generate as much revenue for a bank as the money in checking accounts; but banks profit from clients' savings accounts as well.

The depositing of public funds in banks—whether in commercial banks, mutual savings banks, or savings and loan associations—is usually a clearcut example of private banks pro-

In half the states in this country, banks are allowed to reap windfall profits from funds which in other states are regarded as public funds and are used for educational and social welfare purposes. Because these states have no law requiring that "dormant accounts" be placed in the state treasury after a certain number of years, their treasuries lose important revenues. The state of Maryland collects nearly \$900,000 yearly from dormant accounts, insurance policies, utility deposits, unclaimed wages and other abandoned property; New York State collects \$7 million. Though forcing the banks to turn over these funds to state governments would not make a large dent in governmental debts, it certainly wouldn't hurt; and it would allow the people of the state to benefit rather than the owners of the banks.

—information from "DC Banks Keep Millions in City Revenues" by Amanda Blake in *Washington Newsworks* April 29-May 5, 1976.

fitting from public revenues without having to provide any corresponding benefit to the public. Banks have traditionally acted as the accumulators of investable capital in communities, cities and states, and as the primary lenders for housing and business purposes; in this capacity, they have shaped the economies of our nation's communities. Currently, banks and savings and loan associations provide about two-thirds of all mortgage loans given in the United States and over three-fourths of all mortgages on one-to-four family residential structures. In using this very real financial power, each individual bank decides for itself, with limited regulation and citizen input, to which geographical areas mortgages and other loans are to be given and also for what purpose the monies are to be loaned. Traditionally, banks have used this discretion to deny loans to certain groups (blacks, women, consumer cooperatives) and to residents of certain areas (mostly inner cities).

## Community Strategies

In many cities, among them Minneapolis-St. Paul, Los Angeles, Milwaukee, Washington, D.C., and Chicago, community and citizen groups have mobilized to challenge the lending policies of the banks in their localities. Referring to the denial of mortgage loans on the basis of geography as "redlining," and understanding the banks to be principal (if passive) architects of their housing and commercial environment, these groups are using a variety of different strategies to promote increased investment by banks into their areas. One of these strategies involves public deposits. The groups are demanding a quid pro quo: a bank can hold public deposits and make a resulting profit, but only if



they pledge to provide additional credit to the areas which they are supposed to be serving. Responding to this pressure, the state treasurer of Colorado has issued regulations including social responsibility as a criterion for determining which banks should hold governmental deposits. The city of Chicago has passed legislation mandating the mayor to select, partly on the basis of their past performance, which banks will be public depositories.

### **If public deposits cannot be used as an incentive, they can and should be used as a reward**

Will this strategy prove effective? As an incentive to the financial institutions, it does not have much promise. Banks have in the past refused numerous city, state and federal incentives which would require them to deviate from their current lending practices. While government deposits may reach into the millions, that is not a large sum to the larger banks in the country, many of which hold deposits in the billions of dollars. Even more importantly, public deposits are usually secured by the banks with "good as gold" bonds or bills of the federal or state governments. This means that a million dollars on deposit will be used to purchase a million dollars in bonds or bills. Therefore, only the margin between the interest paid on the securities and the interest paid by the banks to the government can be considered usable money. This margin amounts to a few percentage points, so each million dollars on deposit generates perhaps twenty

thousand dollars for increased investment. Twenty thousand dollars can finance one additional mortgage, but it cannot be considered a significant financial incentive for the banks.

In Chicago, a community group (the Organization of the North-East) is pushing the use of local mortgages as security for governmental deposits. If the mortgages were only 10% or 20% of the security, this would multiply the amount of increased investment, and make this strategy a more promising incentive. Even with this strategy, though, the basic problem remains unresolved: banks, seeing themselves as passive institutions, will not respond readily to incentives pushing them towards significantly different lending policies.

If public deposits cannot be effectively used as an incentive to force banks to alter their lending policies, they can and should be used as a reward to banks which, on their own, have decided to define their function as banks in terms of responsibility to the development of the communities in which they are located.

Several banks around the country have pursued lending policies which are specifically geared towards giving credit to segments of the population ignored by other banks; these banks and the communities which they serve would benefit from the increased profits from holding public deposits. The Bank of Ravenswood in Chicago, in its attempt to answer the credit needs of Ravenswood, has taken out advertisements in the daily newspapers disclosing its mortgage lending to the community. Independence and Community Federal Savings and Loan Associations in Washington are tapping the moderate income black housing market in that city, a market left virtually untouched by the other banks and S&Ls of Washington. The First Woman's Bank of New York is providing counseling and loans to another neglected market, the middle income women in New York.

What these few examples indicate, though, is that even these community-oriented, responsive banks are not reaching the credit-starved inner-city working class. Lending is being widened out to include groups which had previously been denied credit, such as financially-established women and blacks; but the numbers of working poor who still have no way of obtaining loans is significant. The strategic use of public deposits can help our cities and our country move a step towards a more equitable distribution of credit, but only a very small step. Larger steps can and should be taken through community- and publicly-owned and controlled banks. The possible contributions of such public banks to the positive reshaping of the credit distribution and the vitality of our cities will be the subject of an article in a later issue of SELF-RELIANCE.

—William Batko



### **ILSR Publications**

The Institute for Local Self-Reliance has recently published two papers of interest to those concerned with finance and banking. They are:

- 1 How to Research Your Local Bank (or Savings and Loan Association) 36 pp. \$2.00 plus 25¢ postage
- 2 Public Banking: A Model for the District of Columbia 30 pp. \$2.00 plus 25¢ postage

Both booklets are available from the Institute for Local Self-Reliance, 1717 18th Street NW, Washington DC 20009.



# From Productivity to Power

In last issue's article, "Do We Need Large Companies", I discussed some of the evidence indicating that the larger part of our country's wealth comes from small production units. Big business is dominant not so much because of efficiency gained through economies of scale, but because of its easy access to credit, its control of distribution networks, and its dominant role in the political arena in influencing incentives and tax policy in its favor.

In manufacturing, small may be beautiful and it may be practical, but it is not enough. A small factory is not necessarily more democratic, does not necessarily deal more equitably with its workers than a large one. Self-reliant manufacture means more than just community-based production units; it means workers participating in planning their work environments, and, ultimately, it means workers controlling the policy decisions of their companies.

## The Question of Productivity

The primary argument that is always made against devolving power to workers is that productivity will fall. American corporations do not trust their workers' abilities, feel that workers are basically lazy, and that, given the least opportunity, they will shirk their responsibilities or perform their tasks incompetently. Therefore, it is always presumed necessary to have someone peering over the workers' shoulder. As a result, corporations have, in the past decades, increased the number of personnel hired to supervise and watch over other workers.

The empirical evidence, though, points to the fact that workers' participation actually increases productivity. Rensis Likert, a famous sociologist involved in industrial work studies, described one experiment undertaken at a clothing factory. Where change was imposed autocratically, production dropped with the initial introduction of change and then stabilized after 30 days to an output reduction of 10%. Where some participation was permitted, production rose to 10% above pre-change levels. Where total participation was allowed, productivity rose 25%.

In the R.G. Barry Corporation in Columbus Ohio, a company which makes bedroom wear and other leisure items, participation in shop-floor decision-making was actively encouraged. Incentive pay was abolished and everyone was given a straight salary; time clocks were removed. After the changes, absenteeism dropped significantly. Previously, all items produced had been put through quality control; that was abolished and replaced by workers checking their own work. The quality level improved tremendously and the number of maintenance personnel dropped from seven to four.

At Corning Glass in New England, the assembly line was abolished and each worker was given the job of assembling whole products. Within 6 months, absenteeism dropped from 8 per cent to 1 per cent. Factory rejects dropped from 23% to 1% and productivity rose by 47%.

The evidence is overwhelming that where workers are given decision-making control of production their output increases rather than decreases; absenteeism drops and product quality improves. Sociologist Paul Blumberg notes that "there is hardly a study in the entire literature which fails to demonstrate that satisfaction in work is enhanced or that other generally acknowledged beneficial consequences accrue from a genuine increase in workers' decision-making power. Such consistency of findings, I submit, is rare in social research."

## The Question of Power

If worker participation is so successful in improving both worker satisfaction and corporate productivity, why then is American corporate management so hesitant to give workers more decision-making power on the shop floor and in the company? The answer lies in management's fears for the future. In most cases where workers exercise control in the workplace, supervisory personnel is reduced considerably, if not eliminated entirely. The threat to foremen and managers is obvious.

At Polaroid in the early 1960's, workers were put on varied schedules instead of spending all day on one machine, they worked at several different jobs and developed a more intimate understanding of the production process as a whole. They worked more rapidly once the change had been instituted. Their production increased and, according to Ray Ferris who was the director of training at the time, the program was actually too successful. "What were we going to do with the supervisors—the managers? We didn't need them anymore. Management decided it just didn't want operators *that* qualified. We tried twice to reinstitute the program but had to give it up."

## The real question is not one of efficiency but one of power

As with the question of corporate size, the real question in regard to worker participation is not one of efficiency but one of power. In America, management has made timid explorations into what is euphemistically called the "humanization of work" or "job enrichment." Stung by low morale, high absenteeism, shoddy products and low productivity, top management in many firms has given workers more say in plant decisions in an attempt to survive in national and international competition and to defuse worker dissatisfaction. Participation, though, is not power; and workers understand that. A survey of participative techniques, conducted by *Fortune* magazine, pointed out: "The most common theme of complaint heard in job-enriched plants is that there should be, but often is not, more pay for more responsibility and more production."

The quality of work is one issue, and attempts to humanize the workplace are important; but humanization alone does not

## Must Increased Productivity . . .

Texas Instruments, under the aegis of its personnel director Scott Myers, put motivation theory to the test. In the early sixties, the company won a contract for some radar equipment; but because the submitted bid was significantly lower than the actual manufacturing cost, the company was losing money heavily. A foreman took ten of the female assemblers off the assembly line, met with them in a conference room, explained the situation, and asked for suggestions. The women broke down the assembly operation and carefully studied each component operation; within a few hours, they had made some forty suggestions for improvement. At the time, manufacturing each piece of radar equipment required 138 labor-hours; it would not be profitable for the company to continue manufacture unless that figure were reduced to 100. The women were confident that their suggestions would reduce production time to 86 hours. As it turned out, actual assembly time was reduced to 75 hours. The women asked for another meeting, the result of which was a further cut in production time, to 57 hours and finally to 32 hours.

—M. Scott Myers, "Increasing Employee Motivation" in Harold M.F. Rush (ed.) *Managing Change*.

resolve the inequities of the modern corporate system. Even improved wages to accompany improved productivity are not sufficient, for still left unaltered are control over investment policy, control over profits, and ownership of the company. When Fiat workers in Italy went on strike in 1969, they declared, "What we want . . . is everything." And this is the fear which causes management to hesitate in granting even participatory concessions. A little power in the workplace—and the demystification of the complexities of production and management decision-making which accompanies that power—encourages workers to demand more power.

In a Lima, Ohio plant of Proctor and Gamble, non-hierarchical teams were established in order to supervise the work. These teams increased their involvement beyond supervision to include production process decision-making; eventually, they gained control of hiring and firing decision-making in the plant. Workers decided to rotate jobs and learn several skills. In fact, non-specialization became an important aspect of the jobs. One worker noted that "one guy became a very skilled machinist and wanted to concentrate on his skill—so the community fired him. They told him there was plenty of opportunity for that on the outside." Today, workers in the plant set their own pay scales; and all salaries are made known to everyone.

Sweden was one of the countries which pioneered "industrial democracy." Volvo and other companies were among the first in the world to change the structure and conditions of work on

the shop floor. By September 1971, the Federation of Trade Unions was demanding action on other issues: that workers receive, initially, half of all the places on a company's board; that the joint councils be accorded decision-making powers in regard to personnel matters; and that the employer's right to hire and fire at will, as well as organize and direct production, be restricted considerably. Recently proposed legislation in Sweden will increase worker power to the point where management can no longer act independently of worker agreement. It is clear that as workers continue to increase their managerial participation, they will question why management should still control corporate profits and why workers shouldn't have just what management has. The tensions will arise; they are inevitable, given the present structure of the corporate economy.

American management would like to avoid such a power struggle with its workers. It may not have the choice. As worker dissatisfaction and anger rises as a result of intolerable conditions and lack of control, productivity suffers. Worker participation boosts productivity significantly, but it may also lead to an attack on managerial power and profit. In order to maintain itself, the large corporation is being forced to initiate changes which in the short run will improve productivity, but which will also give the worker a taste of what "job power" can be. The process is being initiated by which workers' *participation* in decision-making on the shop floor may lead to workers' *control* over decision-making at both the shop-floor and the company level and then, finally, to worker control of the company from top to bottom, from its production process to its profits.

—David Morris

## . . . Lead to More Unemployment?

Suppose that, at a given moment, a certain number of people are engaged in the manufacture of pins. They make as many pins as the world needs, working (say) eight hours a day. Someone makes an invention by which the same number of men can make twice as many pins as before. But the world does not need twice as many pins. Pins are already so cheap that hardly any more will be bought at a lower price. In a sensible world, everybody concerned in the manufacture of pins would take to working four hours a day instead of eight, and everything else would go on as before. But in the actual world, this would be thought demoralizing. The men still work eight hours, there are too many pins, some employers go bankrupt, and half the men previously concerned in making pins are thrown out of work. There is, in the end, just as much leisure as on the other plan, but half the men are totally idle while half are still overworked. In this way it is ensured that the unavoidable leisure shall cause misery all round instead of being a universal source of happiness. Can anything more insane be imagined?

—Bertrand Russell, "In Praise of Idleness"

**SELF-RELIANCE** is your magazine. Its success depends upon you as much as it depends upon us. Let us know what is happening in your community, especially if your experience may be of help to others. The sharing of knowledge is a powerful tool and is what **SELF-RELIANCE** is all about. We welcome news items related to decentralization and to the struggle of communities towards self-sufficiency. Send us the raw information and tell us how to get in touch with you. We'll do the writing and check with you for clarification.

# Off the Shelf

## Workers' Control

### People for Self-Management Newsletter

Box 802, Ithaca, NY 14850. \$5/year.

The newsletter of People for Self-Management, "an open democratic association for 1) the study of self-management, 2) the enhancement and development of self-management and organizational democracy." Includes articles, news notes, reviews from a variety of perspectives on self-management. Tries to clarify the issues rather than push one perspective. Also includes organizational news and committee reports.

### Synthesis

League for Economic Democracy, P.O. Box 1858, San Pedro, CA 90733. 8 issues for \$2.80.

*Synthesis* is "an anti-authoritarian newsletter for citizen-worker self-management ideas and activities." The editors see the newsletter as both a catalogue of anti-authoritarian organizations and activities and an informal forum for the exchange of ideas related to the goal of "a complete social change to a free and self-managed society."

Harry Braverman,

### Labor and Monopoly Capital: The Degradation of Work in the Twentieth Century

Monthly Review Press, 1975. \$5.95.

An excellent analysis of the process by which workers have been forced to give up control over their product and their work routine. Examines the historical development of the labor/management split under capitalism and analyzes the systematic degradation of work in this century which has resulted in an overeducated and dissatisfied workforce. A good corrective to management science views of participa-

tion and control in that the author views most reforms as changes in the style of management rather than genuine changes in the position of the worker.

John Case and Gerry Hunnius,

### Workers and the Community: Self-Management in the CDC.

Center for Community Economic Development, 1971. 60¢

Makes the case for workers' self-management within Community Development Corporations, arguing that "the CDC's purpose is not simply to raise the standards of economic life in the neighborhood; it is also to change the quality of that economic life." The authors see the need for CDC's to balance profit-making off against other goals, such as building a sense of community and of democratic cooperation, which workers' self-management can effect. Discusses various objections to self-management and also the several forms which workers' control can take.

Andre Gorz,

### Strategy for Labor: A Radical Proposal.

Beacon Press, 1968. \$2.95.

Develops the case for workers' control as part of a broader strategy for social change and liberation. Argues for an aggressive strategy which goes "beyond the paycheck." Advocates workers' control of the conditions and organization of work on the shop level; control of decision-making concerning profits and investments on the company level; well-coordinated worker struggles toward industrial reorganization, the break-up of monopolies, and the reestablishment of real priorities that challenge the "consumer's society."

Gerry Hunnius, G. David Garson, and John Case (eds.),

### Workers' Control: A Reader on Labor and Social Change.

Vintage Books, 1973. \$2.95.

The result of a collective effort by two collaborating groups (the Cambridge Policy Studies Institute in Massachusetts and the Praxis Research Institute for Social Change

in Toronto), this collection of essays and excerpts presents well-documented evidence of the successes and failures of experiments with workers' control. The thrust of the work is an attempt to define and analyze the program of workers' control as a possible strategy for social change which would unite the Left and a revitalized labor movement. "Workers' control" is defined by the editors as ultimate control over what is produced, how it is produced and for whom it is produced.

David Jenkins,

### Job Power: Blue and White Collar Democracy.

Penguin Books, 1974. \$2.25.

A well-documented study of the need for, the rationale for, the experience with and the future of industrial democracy. Using the results of social science research and of many practical experiments in the United States, Western Europe, Israel and Yugoslavia, the author argues that workers' control is more efficient and more humanizing than current employment hierarchies. Distinguishing between control and ownership, Jenkins believes control to be the most crucial determinant of worker satisfaction. The work is limited by the author's avoidance of questions concerning power beyond the shop-floor.

Jaroslav Vanek (ed.),

### Self-Management: Economic Liberation of Man.

Penguin Books, 1975. \$5.95.

A collection of twenty-eight essays divided into four sections: 1) Historical development, 2) Actual cases, 3) Performance, and 4) Economic theory. In his introduction, the editor defines "self-management" as the *direct* involvement of workers and employees in the process of control, management and exploitation of their enterprises, thereby excluding any discussion of collective bargaining and other indirect ways of influencing enterprise policy through union action. The emphasis of the presentation is on economic performance of worker self-managed enterprises rather than on broad social or psychological rationales for self-management. A fine, far-reaching collection of essays.



# Progress Reports

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## Local Initiative

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In the next several months, if everything goes according to plan, a state-owned development bank will begin providing investment capital to community development corporations throughout Massachusetts. Called the Massachusetts Community Development Finance Corporation (CDFC), the new bank is empowered to buy stock in any enterprise that is owned in common by the residents of a given geographical area. No money has as yet been allocated, but an appropriation of \$10 million will be included in the Dukakis administration's 1976-77 budget. The CDFC is unique both in its focus on community development corporations and in the fact that it offers equity capital rather than loans. "Equity" investment, typified by stock purchases, means that the investor gets a return when and if the enterprise begins making money. As the first publicly supported equity finance vehicle in the country, the CDFC may serve as a model both for other states and for the federal government. *Conference on Alternative State and Local Public Policies* April 1976.

The city of Portsmouth Virginia has developed an innovative way to utilize Community Development Block Grant funds to make low-interest loans available to low and moderate income homeowners. The city's Redevelopment and Housing Authority is using its \$200,000 1975 Block Grant to leverage \$500,000 in low-interest rehab loans. By depositing the \$200,000 with a consortium of six local banks as a combination loan guarantee and interest subsidy and at the same time selling \$500,000 in two-year term revenue bonds at 6% interest, the city can provide \$1 of loans at 4½%-5½% over twenty years for every 40¢ in CD money. When the bonds come to term, the mortgages will be sold. It is expected that the available cash resources—from monthly mortgage payments and from the original \$200,000 plus interest—will make possible the sale of mortgages at sufficiently deep discounts to give pur-

chasers an attractive yield and still realize a sale price which will enable repayment of the entire \$500,000 indebtedness. Contact: Portsmouth Redevelopment and Housing Authority, Box 1098, Portsmouth VA 23705.

The Alternative Energy Resources Organization (AERO) and the Eureka Railroad Corporation are collaborating to produce the New Western Energy Show, which will tour the state of Montana in July and August of this year. The show will consist of: 1) a display of operational renewable energy hardware (wind generators, solar panels, solar ovens and cookers, methane digestors, a small water turbine, etc.); 2) an information booth for distributing relevant books and pamphlets; 3) theatrical sketches dealing with energy use and conservation; 4) country and folk music. The Energy Show will travel to twelve towns in the state, staying two to three days in each town. AERO is looking for donations to help foot the bill for the show. AERO, 435 Stapleton Building, Billings, MT 59101.

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## Energy

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The Community Environmental Council in Santa Barbara has initiated a solar energy testing program. They will be installing different types of solar energy systems in a number of homes in order to evaluate and to compare their effectiveness. Of interest to those who own swimming pools, they will be comparing the effectiveness of a simple insulation blanket put over the pool to retain heat to the effectiveness of heating by solar collectors. For information, contact: Irving Thomas, CEC, 109 East de la Guerra Street, Santa Barbara CA 93101.

The Department of General Services in Florida has issued two manuals for use by people doing work in energy conservation and life cycle costing. The Florida Life Cycle Analysis Manual, which costs \$2.00, shows how to estimate total costs of a building, including energy expenditures,

over the thirty year life of the building. Although its temperature information is only of use to residents of Florida, it is an excellent practical primer on the subject. The Florida Energy Conservation Manual, also \$2.00, is filled with Florida-specific information on energy performance data. In Florida, life cycle costing is mandatory for the construction of state-owned buildings of over 5,000 square feet and for all leased buildings of 25,000 square feet or more. Both manuals can be purchased from: Bureau of Construction, Engineering Coordination Section, Room 2512, Larson Building, Tallahassee FL 32304.

Maine Audubon Society's new office building has a solar-based energy system which will be in operation this month. The system uses low-cost air transfer solar collectors whose absorber plate is made out of rolled up window screening. The designers believe, quite reasonably, that the goal in solar energy is not to increase the efficiency of collectors but rather to decrease the cost, since no possible increase in efficiency could match a 30%-50% cost decrease. As a back-up system, the building will use a unique wood burning furnace which separates combustion from heat transfer and which burns the wood almost completely to ash inside the furnace. For information on this sensible and inexpensive system, contact: Maine Audubon Society, 53 Baxter Boulevard, Portland ME 04101. A technical package which includes a set of construction drawings of the building is available for \$8.00.

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## Urban Agriculture

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A rooftop hydroponic greenhouse is being built as a community action project on Chicago's West Side. The project is being sponsored by the Christian Action Ministry, a joint program of 11 Chicago churches which is also involved in alternative schools, day care and after school programs, employment counseling, and other efforts. The greenhouse project arose out of a health sampling program, the results

of which emphasized the importance of raising nutrition levels of the residents of the community. People began to think about growing their own and came up with the idea of a greenhouse. Staffed by senior citizens and high school students, the facility is expected to pay for itself in about six months from revenues generated by the sale of vegetables grown on the roof on a sixty day cycle. According to Clay Collier, sponsor of the project, the 22x44 foot greenhouse is seen as a pilot unit, to be followed by family and block-sized units around the neighborhood.

The Humus Plank—more formally known as the National Soil Fertility Program—has been proposed to their party presidential platforms by Congressmen Fred Richmond (D-NY) and Martin Jeffords (R-VT), both of the House Agricultural Committee. The plank's goal is to make it "national policy to encourage the return of soil-building organic matter to our country's farmlands," so that the environmental burden of urban and agricultural "wastes" can be turned into a major environmental and economic asset. For a copy of the Plank and more information, write to The National Soil Fertility Program, Box 4000, Pleasant Valley, NY 12569.

The Santa Barbara Garden-Farming Project, a joint effort of the Direct Relief Foundation and the Community Environmental Council, Inc., will begin its fourth training program in intensive, small scale agricultural techniques this September. The program is a superb course in ecologically sound, high yield farming which can and should be used in our cities. Graduates of the one year training program are placed by the Direct Relief Foundation in remote areas of developing countries, where they teach the new methods to the indigenous population. The intensive method is based on the use of simple hand tools and, where applicable, relatively unsophisticated irrigation systems; the production of organic fertilizers by means of composts, small scale animal husbandry, leaf litter, turf loam, and cover crops; sophisticated transplanting techniques; hedges for fencing; companion planting; crop rotation; and the development of complex, food-producing ecosystems that are most suited to ex-

isting natural ecosystems. For general information and an application for the training program, write to the Community Environmental Council, 109 East de la Guerra St., Santa Barbara CA 93101. Some knowledge of Spanish and biology are preferred, but are not essential.

## Waste Utilization

The municipal sewage sludge of Bangor, Maine, is now being composted for use as a soil conditioner and mulch on city parks, golf course and other public lands. The project began last June with a \$20,000 one-year demonstration grant from the Environmental Protection Agency. According to EPA, "most cities around the country already have the principal equipment necessary to adopt this relatively inexpensive process. Bangor officials estimate they will save in excess of 50% of their current annual expenditures for loam and mulch materials which will now be replaced with the compost." In addition, the city saves on disposal expense. For more information, contact: US EPA, Office of Solid Waste Management, Washington DC 20460. Attn: Bangor Maine Project. *Compost Science*, Jan/Feb 1976.

Despite the existence of working low technology collection/recycling garbage collection systems in suburban, urban and rural areas, EPA-proposed solid waste guidelines for Federal facilities and agencies generating or collecting 100 tons of garbage per day call for the construction of expensive and yet unproven high technology resource recovery plants. (*Federal Register*, 15 January, 1976.) But the Naval Facility Engineering Command in Alexandria, Virginia has just announced a \$57,000 source separation collection/recycling project at the Port Hueneme, California, Civil Engineering Laboratory. The pilot project will test and evaluate both equipment and collection techniques in an effort to establish the feasibility of source segregation on the base, whose population of 10,000 generates 15 tons per day of

garbage. The project can be scaled up so as to serve the 10,000 residents of the Point Mugu Missile Installation just five miles away, and it is even possible that it may be expanded to serve the adjacent towns of Port Hueneme and Oxnard, California with their combined population of 100,000. For information, contact: William Miller, Program Manager for Solid Waste Research and Development, Civil Engineering Laboratory, NCBC, Port Hueneme, California 93043; (805) 902-5117.

Not all centralized, mixed garbage collection/disposal systems rely upon high technology resource recovery systems. The Lehigh Valley County (Pennsylvania) composting operation has the capacity to shred and compost 300 tons per day of garbage; but the capital expenditure has been only \$2.5 million. Ferrous metals are extracted prior to composting through magnetic separation along a conveyor system. \$500,000 more air separation and screening equipment will be added so that light weight paper and plastics can be removed for resale. The volume of the compost is reduced by 60-70% in a 28 day cycle. When the cycle is completed, the biologically inert humus is used as a cover material for a pre-existing dump adjacent to the plant site. County-owned land will also be reclaimed for park and recreation use. Eventually, the compost will be marketed locally as a soil conditioner. Contact: Stuart K. Wiesenberger, A.L. Wiesenberger Associates, 3440-48 Hamilton Blvd., Allentown, PA 18103.

One of the more clever refinements of conventional toilets is now in common use in Japan. It uses only 2½ gallons of water for a normal flush and, by turning the handle the other direction, uses only one gallon when less water is needed. The water refilling the toilet tank flows through a spout in the top of the tank into a basin for hand washing, and then fills the tank for the next flushing. Saves water, saves space and eliminates the need for a separate wash basin. *RAIN* April 1976.

**When writing to any of the contacts mentioned in SELF-RELIANCE, please send a self-addressed stamped envelope. It will speed the reply and will save these folks some money.**

# Resources

In this issue of **SELF-RELIANCE**, we present a list of publications which we feel contain important information for people interested in urban decentralization. These magazines cover a wide variety of topics, for the issues involved in the struggle for self-reliance are many. The listing is not complete and does not include magazines mentioned in our last issue; it is meant to be a sampling. In our next issue, we will present a list of regional and local publications which our readers should know about.

## COMMUNITY PLANNING REPORT

Published twice monthly by Resources News Service, Inc., 1046 Nat'l Press Building, Washington, D.C. 20045. \$45/yr.

A newsletter for professional planners with a particular focus on the problems of growth and communities and alternative solutions to those problems. Carries excellent articles and fine sections on current research grants, legal developments and bibliographic resources which relate to community planning. A goldmine of information.

## COMPOST SCIENCE.

Published bi-monthly by Rodale Press, Inc., 33 East Minor St., Emmaus, PA 18049. \$6/yr.

The best single source of information on sewage systems, soil humus, wastewater and solid waste. Includes abstracts of theses and articles from scientific journals and presents detailed articles examining various waste recycling systems being tested in this country and abroad.

## THE ELEMENTS.

Published monthly by the Institute for Policy Studies/Transnational Institute, 1901 Q Street NW, Washington, D.C. 20009. Individual subscriptions, \$5/yr.; institutions, \$10/yr.

Focuses on energy, agriculture, and other aspects of natural resources. *Elements* gives in-depth coverage of developments in the international political economy of resources and in the struggle for public control of utilities. Well researched, packed with information that is often difficult to find elsewhere.

## FOOD COOP NOOZ.

Published bi-monthly by the Food Co-op Project of Loop College, 64 E. Lake St., Chicago IL 60601. \$3/yr.

A national newspaper and clearinghouse for food co-op information. Includes reports on co-op successes and failures, and practical advice to those engaged in starting a co-op or keeping one going. Subscription includes a biannual, computerized, nationwide Directory of Food Co-ops.

## NOT MAN APART.

Published semi-monthly by Friends of the Earth, 529 Commercial, San Francisco, CA 94111. Non-member subscription, \$10/yr.; membership which includes subscription, \$20/yr.

A fine newspaper from an activist organization. Dozens of short updates on environmental struggles, plus one or more in-depth analysis per issue. "The Nuclear Blowdown" is a useful, chilling section about the hazards and status of nuclear power, generally researched from the industry's own sources.

## SHELTERFORCE.

Published quarterly by the Shelterforce Collective, 31 Chestnut St., East Orange, NJ 07018. \$3/yr.

A national housing newspaper which attempts to provide a forum and an impetus for a stronger national movement. Excellent reporting on tenant struggles around the country and perceptive analyses of broader trends in landlord/tenant relations and in governmental housing policy.

## SOLAR AGE.

Published monthly by Solar-Vision Inc., Rt. 515, Box 288, Vernon, NJ 07462. \$20/yr.

This new magazine deals with all facets of solar energy utilization, presenting interviews with leading solar technologists, plans of solar heating and cooling systems and status reports on solar energy developments on the national level. Includes extensive charts, photographs and illustrations.

## SOLAR ENGINEERING.

Published monthly by Solar Engineering Publishers, Inc., 8435 N Stemmons Freeway, Suite 880, Dallas, TX 75247. \$10/yr.

Begun this year; geared towards those people already in the solar industry. The focus is on industry news, architecture and design of systems, technical data and governmental action. Specific information on grant-getting and solar building is included.

## TILTH.

Published about once a month at PO Box 2382, Olympia, WA 98507. \$5/yr.

"Presents articles and features about ecologically sound agricultural projects in the Northwest and around the country." The focus is small scale, and spans rural and urban efforts, describing techniques, projects, distribution efforts, groups and publications. Tilth people have recently been branching out into research of their own (for example, low-energy greenhouse/aquaculture systems), which they will report on in their newsletter.

## THE WORKBOOK.

Published monthly by Southwest Research and Information Center, PO Box 4524, Albuquerque, NM 87106: subscriptions: students, \$7/yr.; individuals, \$10/yr.; institutions, \$20/yr.

"*The Workbook* is a fully-indexed catalogue of sources of information about environmental, social and consumer problems. It is aimed at helping people in small towns and cities across America gain access to vital information that can help them assert control over their own lives." It is an excellent guide to the many-faceted movement for political, social and economic change in this country.

## WORKING PAPERS FOR A NEW SOCIETY.

Published quarterly by the Cambridge Policy Studies Institute, 123 Mt. Auburn St., Cambridge, MA 02138. Subscriptions: students \$8/yr.; individuals \$10/yr.; institutions \$12/yr.

A magazine which examines developments in the "nascent economic rights movement." Solid investigative reporting on alternative public policies, workers' control, the cooperative movement and other promising directions for social change.



# • Getting the Lead Out

The problem of contamination of urban grown vegetables by air pollutants has received a great deal of attention in the past year. Rightfully so, for it is an issue which must be faced squarely, and addressed at its roots — the quality of the urban environment — rather than at the symptoms, of which polluted gardens are only one. (For a discussion of the context of the problem and for some possible responses, see "Poisoned Cities and Urban Gardens," on publication list, p. 15).

The only sure way of knowing the extent of heavy metal accumulation in your produce is to have the produce tested. It's not a complicated test; but, because of the equipment used, it is not one that is easily done by individual gardeners. This season, there will be testing programs in a number of cities. However, if we are to begin to develop a "map" of zones of relative safety and hazard for city gardeners, it is imperative, because of the location-specific nature of the problem, that testing be conducted in every city in which people are gardening. In this article, we will present a basic guide to setting up a heavy metal testing program for gardens in your area.

The amount of heavy metal accumulation in plants, either from direct deposition from the air or from uptake from the soil, varies greatly with the distance of the garden from the pollution source. No one has yet developed a general formula that would permit a prediction of change in lead content for a given change in distance from the pollution source. Clearly, further is better; but it is hard to be more specific.



In addition to distance from the roadway or other pollution source, there are other variables which can effect the degree of heavy metal accumulation. They include:

- **crop variety** Leafy crops (lettuce, greens, etc.), tend to accumulate higher heavy metal concentrations than fruiting crops (tomatoes, cucumbers, beans, melons, etc.), with root crops intermediate. In addition, older plant parts, because they grow more slowly, tend to show higher lead levels than younger parts; for this reason, it is wise to harvest promptly and then plant again.

- **soil quality** Soil with a higher pH factor (more alkaline) tends to reduce heavy metal uptake, though it may also reduce yields. According to some reports, high levels of organic matter in the soil also tend to reduce uptake; this may be due to raised soil pH, or due to the binding of the metals to complex organic molecules, making them unavailable to the crops.

- **wind patterns and obstacles** Being upwind of a pollution source is healthier than being downwind. If the garden is downwind, a windbreak (trees, buildings, etc.) between the garden and the major pollution source may reduce deposition by providing a barrier to movement of heavy metal particles. However, a windbreak on the side of the garden *downwind* from the pollution source may actually increase deposition by preventing the wind from carrying particulate matter beyond the garden.

- **thoroughness of washing** A thorough washing of vegetables can remove as much as half of the heavy metal accumulation on a crop. Some studies indicate that a mild vinegar solution is a more effective cleansing agent than plain water. In any case, smooth-skinned produce is easier to clean than rough-skinned produce. Prolonged washing or soaking, however, may leach water-soluble vitamins or minerals as well as heavy metals.

## Testing

There are four components to a successful testing program: locating an agency to do the testing; designing the sample; collecting the sample; and evaluating the results.

**Agency:** The logical place to look for testing help is your local Cooperative Extension Service. It is a function clearly within their line of responsibility, though some units might not be ready to recognize it as such; firm but gentle pressure, and an unwillingness to take no for an answer, are then in order. Other agencies that might have the facilities and staff to assist in a testing program include the municipal or county environmental services department (you could start with the air quality monitoring division, which is already involved in lead testing, though of a different sort), or the public health agency involved in lead paint monitoring and blood lead level testing. It might even be possible to find a sympathetic chemistry or environmental studies professor at a local university or community college; suggest your testing program as a class project.

**Sample:** Ideally, the sample should be drawn from a number of carefully considered test gardens, so that such variables as crop variety, distance from roadway, age at harvest, etc., can be equalized. It is late in the season, though, so you may have to go with already planted gardens rather than design the perfect testing situation. In any case, the following parameters should be taken into account when preparing a testing sample:

- test produce from a number of *different garden sites*, in different neighborhoods, with different pollution levels. It is a tragic fact of city life that the poorest neighborhoods, commonly the homes of minority groups—where urban agriculture could perhaps have its greatest impact—are often the most heavily polluted (see *Environment*, Feb. 1976). It would be useful to be able to document such discriminatory contamination.
- test *store bought produce* of each crop variety as a control, preferably from stores in different neighborhoods. Knowing there is lead in your home-grown lettuce is meaningless unless you also know whether there is more or less lead in supermarket lettuce. You will have to make the choice between lead and pesticides yourself.
- test each crop type, in each garden site, at *different distances* from the road.
- test at least *five samples of each possibility*; a smaller sampling would reduce the statistical significance of the testing program results. A "possibility," in this case, would be a vegetable type, from a given site, at (perhaps) a given distance from the road. Five samples of each possibility, if you have five gardens, two stores, three crop types, and no "distance from the road" variable, means 150 separate analyses to be done. So you may have to limit the scope of your program to stay in line with available resources; but even if you have to reduce the number of samples or test sites, a small program is far better than none at all.
- keep *thorough records*; crop varieties, planting and sampling date, whether sample is old or new growth, site location, average daily vehicle flow on neighboring roads (usually available from the traffic department), distance of garden and/or crop row from roads—all this data should be carefully noted and compiled.

**Collection:** When collecting samples, store them individually (plastic bags with twist ties are ideal), and bring them as soon as possible to the place where they will be analyzed. For the sake of consistency, samples should either *all* be washed or *all* unwashed. Washed fruit will yield the most meaningful results, since most people wash their produce before eating it. At the testing agency, each sample will be weighed, dried, weighed again, and analyzed. The data you receive from the testers will be the lead concentration in each sample, expressed in parts per million (ppm) on a dry weight basis.

**Evaluation:** In order for the data to be useful, the concentration must first be converted to a fresh weight figure. Divide the dry weight of the sample by the fresh weight (if these numbers are not available, use the averages from the USDA Handbook #8, *Composition of Foods*, or a similar reference) and multiply that result times the parts per million (ppm) lead, dry weight basis, as measured by the testing agency. The result will be the ppm lead in the fresh sample.

Next, average the results for each possibility, and compare the figures for different crop types, and from different garden sites. Compare them, further, with the results from the supermarket produce and with the average lead content in American grown vegetables of about 0.2 ppm (with a range of 0.1-1.3 ppm for

all samples tested). Based on the comparisons, you will be able to make some assessment of your local situation—whether some sites are more or less suitable than others, whether any of the produce from your community's gardens is more or less contaminated than supermarket produce. Hopefully, the end result of this testing and evaluation procedure will be enough information so that intelligent choices can be made concerning where and what to plant in your neighborhood. We look forward to hearing about your results.

An additional piece of information you may want to pull out of these data is an estimate of the increased daily lead burden incurred by eating all or part of your produce from a contaminated source. If you have test data from a complete assortment of vegetables, you can multiply concentration of lead in each variety by the average daily consumption of that vegetable. If your test has focused basically on "leafy, root and fruiting" vegetables, you can use approximate average daily *fresh vegetable* consumption figures of 31.6 grams per day leafy vegetables, 88.5 grams per day root vegetables, 94.4 grams per day "fruiting" vegetables\*. Multiply consumption for each vegetable type by the lead concentration found in each; then add the three figures to derive the total daily contribution of lead from the consumption of fresh vegetables.

Again, compare those figures for garden produce and supermarket produce. Compare them, as well, with the "normal" daily lead burden of an adult in, say, Washington, D.C. of about 434 micrograms (mcg), of which about 69% comes from food and drink, and 31% from respiration; or compare them with more than 300 mcg a day a child can ingest simply by licking a hand or toy dirty with urban dust (which often contains lead concentrations of 2000 ppm).



It is difficult to speak of a "safe" level of lead consumption from garden produce, both because a safe level is itself an elusive concept, and because lead intake from other sources can vary so widely. Whatever the complexity of determining safe levels, if a testing program like the one outlined above were instituted wherever city farmers are planting gardens, city dwellers would be in a position to know the relative safety of garden and supermarket produce, and to know roughly how much one's daily lead intake would be increased by eating one or the other.

What if all your options are "dirty" ones? Then you are back at the beginning, confronting the issue at its root: the problem is not with our gardens, but with our cities. A city in which it is unsafe to raise carrots is not a safe place to raise children. We can choose to live with that or we can choose to change it. This is hardly impossible technologically, though it will be no mean feat politically. Difficult as it may be, it is really the only long-run option which remains.

—Gil Friend

\* Cabbage is included with "fruiting" vegetables, since its leaves generally are not open; if you would rather include it with leafy crops, use 42.8 grams per day for leafy vegetables, and 83.1 grams per day for fruiting.

# • The Wealth of Cities

Most of the wealth of our cities and communities takes the form of real property: land, housing, and commercial, institutional and industrial development. This wealth is sizeable; and its disposition is crucial to the well-being of a given community and its residents. The value of the land is, in effect, the consequence of investment in public facilities and utilities, community development and population growth; the value is not the result of action by individual owners. It is public action which creates the facilities and provides the services which increase the value of properties; and it is public action in the form of commerce and the demand for housing which actually creates the wealth.

This may be so, but it is certainly not an accepted axiom of the business world. The whole concept of defining real property, whether land or buildings, as *community* wealth which has little value exclusive of services and facilities provided by the city and demand generated by the public at large, is a concept which runs counter to our system of property which emphasizes private investment in the hope of private profit.

The example of privately-built new towns, though, shows just how false this individualistic, profit-oriented viewpoint is and how similar the role of the private developer of a new town is to the role of the public in an organically-developed city or community. In creating a new town, the investor-developer provides facilities and services. He does so as an investment, trying to raise the value of the land so that when it is sold, he can recapture his capital outlay with profit. The property is sold to builders who construct residential dwellings to meet the demand for housing created by the developer-built commercial and institutional facilities. Were the facilities not built previously, there would be no demand. The developer, by creating the community facilities and services, has clearly created the real property wealth of the community. In this case, since he is a private investor trying his luck, it is not considered unfair that he receive a reasonable rate of return on his investment for bearing the initial risk of building the community.

When a city functions in the same way as the private developer, it is not expected to receive return on its investment. In our towns and cities, wealth is created by the investment of public monies obtained through taxation, and by the many small acts of residential, commercial and institutional investment of the public at large. If city streets weren't paved, if schools and hospitals weren't available, the value of real property would be less. One would assume that in the same way that the new town developer is entitled to a return on his investments, in a municipality where the real property value is the result of public, community action, that the public, the community as a whole—and not just those with the financial resources to capitalize on the situation—should benefit from its own investments. In most of our communities, this is not true; individual property owners realize large increases in land values, increases which are in large part not the result of their own efforts. In some cities around the country, people are beginning to look at the wealth of communities in a new light and are beginning to develop ways in which the community can recapture these "unearned increments" and use them for public purposes.

The model for these efforts to control the real property wealth of a community for the specific benefit of the community is the Community Land Trust (CLT). CLTs are non-profit community organizations, either locally or regionally based, which acquire, hold and manage land in public trust. The land trust is governed by a board of trustees which leases land according to clearly defined purposes. Users of the land sign long-term leases which are secure provided that the property is used in accordance with the community's needs as spelled out in the terms of the lease. Since the land is leased and never sold, it cannot be used speculatively for private gain.

Originally oriented entirely toward preserving rural lands, the land trust concept is now being adapted for use by urban communities. There are more than twenty CLTs in the country; a few of these are entirely urban in their focus and a few more are regional trusts which envision urban holdings in the future. The urban Community Land Trusts include two on the West Coast—The Oakland Land Project and the Neighborhood Foundation—and two on the East Coast—the Roxbury Community Land Trust and the Adams Morgan Community Cooperative Housing Trust.

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### The land trust concept is now being adapted for use by urban communities

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The Oakland Land Project is the eight month old pilot model of the Trust for Public Land. The focus of the project is on acquiring vacant lots and dilapidated structures for development into small parks and urban gardens. Most of the properties have been given to the land trust by savings and loan associations which are able to derive tax benefits from giving away the foreclosed or abandoned parcels of land. The Oakland Land Project was originally a joint project with the Black Panthers; now, the Trust for Public Land provides the funding and a trained staff of four people who supervise the acquisition and the programming for the land. The group has engaged local businesses and organizations, such as the San Francisco Community Design Center and the Alameda County 4-H Program, to help design and implement the program. The Trust for Public Land is now considering similar land trusts in Los Angeles and Newark. For more information, contact Peter Stein at the Trust for Public Land, 82 - 2nd Street, San Francisco CA 94105.

Another West Coast land trust, the Neighborhood Foundation in San Francisco, is more concerned with buying buildings than with designing open space. At present, the Foundation owns four buildings and an empty lot. Initial funding for the program came from a foundation grant which was used to secure bank loans. The immediate goal of the group is to use rental income from the buildings to rehabilitate the properties while allowing residents to remain in their homes. The group is working on developing an effective way for residents to own and manage their own buildings and is experimenting with "sweat equity" and finance training programs for tenants. One plan under consideration involves joint ownership of the buildings by the Foundation and by residents. The Foundation will retain some interest in the



property in perpetuity so as to prevent speculation and resale. For more information, contact Bruce Fortin at the Neighborhood Foundation, 300 Page, San Francisco CA 94102.

On the East Coast, the Roxbury Community Land Trust is the most well-developed urban land trust. A few years ago, the citizens of Roxbury were able to halt plans to build an inner belt of Interstate-95 through their community; but before they succeeded, 175 acres of land had been cleared. That acreage is owned by the state's Department of Public Works; but the South West Corridor Land Development Coalition and its land trust have a commitment from the state which gives the Roxbury Community Land Trust actual say over the disposition of the land. A proposal has been drafted, which should result by June in a contract with the state, which details the trust's plans for the corridor. The plan has been designed with the capabilities of six Roxbury and Jamaica Plain Community Development Corporations specifically in mind. Projected uses for the land include well-planned open spaces, a supermarket, a cleaners and other service and industrial development. Criteria for use of the land include the provision of jobs for area residents, community participation in ownership and conformance with the neighborhood development plan. More information, including the proposal itself, is available from Elbert Bishop, Director, S.W. Corridor Coalition, 27 Dudley Street, Boston MA 02119.

In Washington DC, the Adams Morgan Community Cooperative Housing Trust is part of the non-profit Adams Morgan Organization (AMO), the elected neighborhood government. The trust plans to acquire single and multi-family buildings through gift and purchase and then make them available to low and moderate in-

come families. Several properties are already under consideration, but the groundwork is still being laid. Once established, the trust will permanently remove the housing from the private market by holding it "in trust" jointly with the cooperative owner/residents, along the lines of the Neighborhood Foundation's plan.

The Community Land Trust is an old idea but its application in America and in urban areas is new. The hope is that if a neighborhood controls its own wealth, its own land and housing, for the common good and not for profit, then stabilization and rational development will be possible. Then, cities and neighborhoods will not be so badly used and abused by speculators and opportunists. Huey Johnson of the Trust for Public Land quotes R.W.G. Bryant on what New York would be like if the Dutch founders had retained Manhattan in public ownership, thereby keeping the full economic base for the city treasury:

*Land values in Manhattan might be a good deal less than they are, development would probably be less centralized. The city would probably not have to worry about levying taxes on property, in fact it might even be declaring an annual dividend. Certainly, it would have the resources to do all manner of things it would actually want to do, and simply cannot, for want of money.*

Whether the Community Land Trust can now, three hundred years later, effect significant positive change in our cities and neighborhoods remains to be seen; it is our hope that it can.

—James Taylor

## The Battle for Municipal Garbage continued from page 2

metal, newsprint, paper stock and plastic. Another 20% to 30% of garbage is organic waste which can be collected for composting but which would best be handled by backyard composting or by any one of a variety of in-house toilet systems now available. Separate collection of the materials are delivered to processing facilities which cost about \$100,000 per 275 tons daily capacity and which require only 10,000 square feet of space. One such facility has been operating successfully in Alexandria, Virginia, for over three years.

The technology is simple and small scale. It takes four minutes per person per week to prepare garbage for proper collection and resale. Compartmentalized household containers are available to save space. Decentralized smelting facilities are in operation which allow for higher prices for reclaimed aluminum. Laser technology has been adopted to color-sort glass as it passes along a conveyor belt. Many cities have already instituted the separate collection of newsprint and/or organic wastes.

Decentralized collection/recycling systems do not involve the high capital investment of the high technology systems; and their operating expenses are also low. By simply carrying their cans to the front curb, residents of Arlington, Virginia, will save \$270,000 annually, or 40% of the labor cost for garbage service. In Portland, Oregon, and in other cities, the collection is effected by small satellite vehicles which cost \$2,000 each. Standard garbage collection is done by large compaction trucks which cost \$35,000 apiece, which last four years and which get four miles to the gallon of gas.

The low capital expense coupled with the low operating costs enable these decentralized systems to avoid the skyrocketing costs of traditional collection and disposal which is as high as

\$60 per ton in some cities. For the same reasons, decentralized collection/recycling operations are compatible with "bottle bills" and packaging control legislation already passed in five states. They do not require the vast tonnage of garbage which the high technology systems need in order to approach profitability. And one final consideration: these operations have proven compatible with the interests of unionized garbage workers in Portland, Oregon and in Somerville, Massachusetts, and would be easily adaptable to the recently proposed decentralization of the entire Department of Sanitation in New York City.

The collection/recycling operations are successful, but they are fighting against powerful opposition. They have a fledgling newsletter for communication with one another and for telling their story to the public, but they have no way of matching the lobbying and advertising campaign being conducted nationwide by the supporters of the corporate-backed resource recovery plants. Though cities and states have been advised by various independent consulting firms not to invest in the high technology systems, the corporations in whose interests the high technology systems would operate are still very actively trying to convince cities that capital-intensive, centralized plants are the way to go.

The outcome of the battle for municipal garbage has not yet been decided; but it is a fight which has direct and significant political, economic and philosophical implications. The battle rages: it is time for Americans to scrutinize closely their production and waste systems and to begin to plan rational systems which reinforce sensible conservation and use of our finite resources.

—Neil Seldman

# The Institute for Local Self-Reliance

The Institute for Local Self-Reliance, Inc., explores the potential for, and the implications of, high density population areas becoming independent and self-reliant. The staff of the Institute provides technical assistance to municipalities and community organizations in its several areas of expertise. At present these areas are:

## **Municipal waste management**

Investigating and developing community-based solid waste collection and recycling systems, and examining the possibilities for solid waste processing and manufacturing facilities and for sewerless toilet systems.

## **Municipal finance**

Exploring the role of credit within a city and evaluating the possibilities for community-controlled banking and credit institutions in our cities and neighborhoods.

## **Urban Energy Resources**

Emphasizing decentralizing technologies such as solar collectors for thermal energy and solar cells for electrical generation; providing assistance in achieving the reduction of energy demand through end-use conservation and in increasing the supply of renewable energy sources.

## **Urban Food Production**

Examining food production systems appropriate to high density population areas, among them rooftop hydroponics, greenhouse design, intensive organic gardening, basement sprout and earthworm production; evaluating the impact of air pollution on urban agriculture.

## **Community Housing**

Evaluating and developing programs for community self-help housing and cooperative ownership.

The Institute approaches local self-reliance from many directions: basic research; development of working demonstration models of new institutions, new technologies and small-scale production systems; development of educational materials and dissemination of information.

Some of the recent activities of Institute staff members include:

- technical assistance to municipal agencies collecting data on credit activities of banks and Savings and Loan Associations in Washington, D.C.
- evaluation of the potential for a municipal bank for Washington, D.C.
- planning and development of a rooftop greenhouse appropriate for an apartment house of low-income senior citizens.
- design of a skills questionnaire to inventory a neighborhood's skill and tool base
- consulting in regard to a legal dispute concerning the city of Alexandria, Virginia's solid waste disposal system
- creation of a task force on energy conservation and insulation in a low-income neighborhood in Newark, New Jersey

The work of the Institute is supported in part by foundation grants and primarily by the sale of literature and by technical consulting. The future of the Institute depends upon the support of people who believe in the concept of local self-reliance and who want to actively assist in the promotion, refinement and evaluation of the concept.

## New Publications From ILSR

All publications are available from the Institute for Local Self-Reliance, 1717 18th Street, N.W., Washington, D.C. 20009. Please include 25 cents with each order for postage and handling (50 cents with orders for garden charts).

<b>Garbage in America: Approaches to Recycling</b> 36 pp.	\$2.00
<b>Kilowatt Counter: A Consumer's Guide to Energy Concepts</b> 36 pp.	\$2.00
<b>Gardening for Health and Nutrition</b>	\$3.00
This poster joins <b>The Urban Farmer</b> in our series of informative gardening charts	
<b>Neighborhood Technology</b> — reprint from <b>Working Papers</b> 6 pp.	.25
<b>Poisoned Cities and Urban Gardens</b> — reprint from <b>The Elements</b> 4 pp.	.25
<b>The Role of Solar Energy in the Federal Energy Program</b> 4 pp.	.25
<b>How to Research your Local Bank (or Savings and Loan Association)</b> 36 pp.	\$2.00
<b>Sewage Treatment Technology and our Urban Communities</b> 10 pp.	.75
<b>Public Banking: A Model for the District of Columbia</b> , 30 pp.	\$2.00
<b>The Dawning of Solar Cells</b> — revised and expanded	\$2.00

## Notes

**Boston Wind needs help.** Boston's alternative energy center has been forced to relocate due to a fire which destroyed its home in Jamaica Plain. The group has temporarily found office space at 2 Mason Court, Charlestown MA 02129. They are now trying to reconstruct their mailing list and are searching for a new home somewhere within 45 minutes of Boston. If you want to be on their mailing list, send them a postcard with your name and address. And if you want to help them out, send them a donation so that they can get back on their feet again.

**The Foundation for Self-Sufficiency** is in need of a couple of large, used, upright, above ground swimming pools, 18 or 24 feet in diameter, as well as some smaller 8 foot or 12 foot pools, "to be used for aquaculture and insect culture experiments at their research center in suburban Maryland. They can pay for the pools, but would gladly accept donations. Write Greg Welsh, 35 Maple Avenue, Catonsville MD 21228. For more information about the Foundation's work, please send them a self-addressed, stamped envelope.

**A list of colleges and universities** which offer solar energy courses and areas of concentration in solar energy has been compiled by Winifred Klein of the International Solar Energy Society. At present, there are no degree programs in solar engineering, but one can major in solar energy studies at several engineering schools. The list provides names and addresses of people to write to for information on courses and programs. Send a self-addressed, stamped envelope to Winifred Klein, ISES, 12441 Parklawn Drive, Rockville MD 20852.

**The Neighborhood Councils**, P.O. Box 407, Independence, MO 64051, has obtained funding to create and disseminate a library of multi-media documentaries on "neighborhood success stories." If you have a success story to tell about some "cooperative, self-sustaining neighborhood activity," send them an outline. They will let you know if they can use your story; and they will pay time and material costs of providing 35mm slides and a write-up on "how to do it" for stories they do use. They plan to make the finished programs available nationwide through local libraries.

## Support Self-Reliance

Two years ago, the Institute for Local Self-Reliance was incorporated as a tax-exempt, non-profit organization. Since that time, we have attempted to clarify and to spread our ideas through our research, projects and writings. Now, we are pleased to present, to a wide audience, important information and analysis stemming both from our own work and from the work of others. We feel that self-reliance is a concept whose time has come; and we plan to report on developments around the country which confirm that belief. Your subscription to SELF-RELIANCE will enable you to remain aware of current developments and will also help to support the activities of the Institute. You may continue to receive this newsletter every two months in one of two ways:

### 1 Subscribe to SELF-RELIANCE:

A year's subscription (six issues) costs \$6 for individuals and \$12 for institutions, libraries, government agencies and private businesses. Out of U.S., add \$1.50/year for surface mail. U.S. first class, add \$2.00/year. For air mail, add \$2.60/year, North America; \$4.20/year, Central America; \$5.10/year, South America, Europe, Mediterranean Africa; \$5.80/year, Asia, the Pacific, other Africa, USSR.

### 2 Become an Associate Member of the Institute For Local Self-Reliance:

The \$25 annual dues (\$40 for institutions) entitles you to a year's subscription to SELF-RELIANCE and a 20% discount on all Institute publications.

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